SEAGATE

Exos® CORVAULT™ S100R010-01 Release Notes

Description

This package delivers firmware for the Exos CORVAULT storage enclosure.

Model	Firmware version
6575	S100R010-01

Update recommendation

This is a recommended firmware update.

Operating systems

Supported operating systems include:

- Microsoft Windows Server 2019
  Microsoft Windows Server 2016 Hyper V
  Microsoft Windows Server 2016

- Red Hat Enterprise Linux 8.0
  Red Hat Enterprise Linux 7.6

- SuSE Linux Enterprise Server 15
  SuSE Linux Enterprise Server 12 SP2

- VMware ESXi Server 6.7 U1
  VMware ESXi Server 6.5 U2

Installation instructions

To install this firmware by using either the Storage Management Console or the FTP/SFTP interface, see the *Seagate Exos CORVAULT Storage Management Guide*.

New features or enhancements in S100R010-01

- Implemented the ability to detect the flash chip variant and to automatically select the appropriate bus timing parameters for the chip. This ability will enable handling of alternative flash memory parts without slowing down the memory timing for the existing parts.

Issues fixed in S100R010-01

- Increased flash mapping memory to accommodate larger CPLD images.

- Fixed an issue where firmware build failed due to incorrect bit bucket handling while rebooting the partner controller.

Known issues and workarounds

Issue: A few event messages include a drawer ID, which is not applicable.
Workaround: Ignore the drawer information reported in the event messages.

Issue: Redundant response messages are displayed for the CLI `map volume` command.
Workaround: Ignore the redundant messages.

Issue: When running the CLI `set password` command, pressing Tab to see the command options displays "<tab>" in the command line instead of showing the options.
Workaround: Press Backspace to remove the "<tab>" instances. To see what the command options are, view the command's help.

Issue: The Management Controller does not reboot after a GEM update.
Workaround: Restart the Management Controller.

Issue: Build date does not include year.
Workaround: No workaround required. The system build year is shown as part of the bundle build date on the **Maintenance** > **Firmware** > **System** page. It can be also be seen by running the CLI `show versions` command.

Issue: In the Storage Management Console, **Provisioning** > **Hosts** > **Create Host**, shows the first Initiator ID **Nickname** field as empty. The value does not appear until you select that initiator ID.
Workaround: The nickname value appears after the initiator ID is selected.

Issue: For volume mappings in the CLI, if the `access` parameter is set to `no-access`, the CLI `show maps` command does not show all the volumes.
Workaround: Do not map volumes using the 'no-access' option.

Issue: Controller shows incorrect firmware status after a connection failure. An ethernet connectivity issue during the upload leaves the firmware updated activity progress in an 'in progress' state and not a 'timed out' state.
Workaround: Restart the firmware update by uploading the file again.

Issue: Slow disk performance resulting in a cache I/O stall with an event similar to: "WARNING Killed partner controller. The reason for this is partner I/O stall in cache."
Workaround: Replace the disk that is slow and having timeout problems with an another disk.

Issue: No provision in CLI to set identification LED for fans.
Workaround: None.

Issue: The CLI `show enclosures` command shows bus ID and target ID properties that are not applicable to this product.
Workaround: Ignore bus ID and target ID fields.

Issue: Controller identification LEDs are not working properly in the Storage Management Console. When identification LEDs are turned on for both controllers and one controller is removed and reinserted, the Storage Management Console continues to show the LED as turned on even though the physical LED is turned off.
Workaround: Turn LED off and back on.

Issue: On a disk group with critical disks, the non-degraded disks locator LED is always `ON` in the Storage Management Console's **Maintenance** > **Hardware** page and not blinking like the physical LED on the enclosure.
Workaround: None.

Issue: Rear fan module LEDs flash after swapping the controllers between A and B slots. The issue also persists during the chassis power cycle.
Workaround: Power-off the chassis and wait for the PSU LEDs to go off. Then power-on the chassis.

Issue: Controller crashes on code load when partner firmware update (PFU) is disabled.
Workaround: Shut down the controller module to be replaced, halt I/O, and disconnect all host cables from that module. Insert a replacement controller module and wait for system restart to complete before reconnecting host cables. To verify that the system restart is complete, check the controller LED status. You can also check status of the system in the Storage Management Console.

Issue: The default DNS hostname shows the incorrect midplane serial number.
Workaround: Set a DNS hostname using the Management Controller (MC) CLI.

Issue: The controller loses communication with the host through the inband interface during a PFU.
Workaround: Disable the PFU setting.

Issue: If a controller is removed while the LED is blinking, upon insertion the LED stops blinking.
Workaround: Resend the CLI `set led <enclosure> on` command for the LED to blink.

Issue: When a rear fan fails, the fault LED is not illuminated.   **Workaround:** An alert is provided so the user will know there was a failure. The alert "There is a problem with a FRU. (FRU type: Fan Module 1, enclosure: 0)" appears in the Storage Management Console or can be seen in CLI by running the `show alerts` command.
Issue: During a failover or failback event/error recovery, the controller hangs and does not automatically recover.   **Workaround:** The controller must be pulled and reseated.
Issue: For an ADAPT disk group, any volume size less than 9GB reports volume too small.   **Workaround:** Use a larger volume size.
Issue: Aggregate health is `Degraded` or `Bad`, without any unhealthy components when the CLI `show system` command is run.   **Workaround:** Wait for 5-10 seconds and run the command again. This will allow the collectors to run and the unhealthy condition will be cleared.
Issue: The CLI `show disk-statistics` command returns "Error: An invalid device was specified".   **Workaround:** None.
Issue: If controllers A and B are connected to different networks, the fully qualified domain name (FQDN) of the partner controller (controller B) is not displayed after setting the hostname.   **Workaround:** Check the partner controller's FQDN from the partner controller's Storage Management Console or CLI.
Issue: The controller can be reached by all protocols using the previous DNS settings, even after the settings are changed.   **Workaround:** Do not manually set DNS settings while running DHCP. Let DHCP automatically set settings for the user.
Issue: Not able to verify Fault (amber) LED of mini SAS port on controller as the fault is not propagated to show on the enclosure fault LED.   **Workaround:** Turn on the identified LED of the faulted system.
Issue: Shift+click does not work for check boxes in the Firefox browser.   **Workaround:** Individually left-click on check boxes to select them.
Issue: Amber fault LED on enclosure top lid, does not glow on the faceplate when the two expanders are removed. No fault is generated in Generic Enclosure Management (GEM).   **Workaround:** None.
Issue: When one of the controllers is down (logical shutdown), then the enclosure's logic fault LED does not turn on as expected.   **Workaround:** Restart the controller which is down.
Issue: During reconstruction of a disk group, the `LED Status` property shown by the `show disks detail` command displays `Online` instead of `Rebuild`.   **Workaround:** Use the CLI `show disks <disk-groups>` command and check the `Jobs` field of that drive to determine the activity on the disk group.
Issue: If both the controllers are replaced simultaneously, some disks go into a leftover state.   **Workaround:** Replace one controller at a time. Run the CLI `show versions detail` command and wait until the controller being replaced shows just the bundle version in the `Bundle Version` row.
Issue: After restart, the platform takes 4 minutes to synchronize which is longer than the expected time of 3.5 minutes.   **Workaround:** Wait for 2 more minutes for the post restart synchronization.
Issue: If the controllers restart during daylight savings time, then the controllers need a short duration to sync to the System Time or the NTP (network time protocol).   **Workaround:** Approximately, after 2 minutes the controllers will sync up their time to the NTP and return to normal operation.
Issue: A controller halts during the restart and does not respond.   **Workaround:** Power cycle the system.
Issue: The system does not report that a direct-attach disk is single ported (that is, not accessible to both controller modules) and adjust the system health accordingly. This will not change the outcome of any I/O to a disk already in use. However, it can unexpectedly cause disk-group creation to fail if the owning controller cannot see the single-ported disk. In the case of failover, if the surviving controller can't see the disk, the disk will be marked as inoperable.   **Workaround:** None.
Issue: When you use the Safari browser to log in to the Storage Management Console, you cannot establish a stable connection with the CORVAULT system. A warning message says "Communication with the system has been lost. Connection will be automatically restored once communication with the system has been established."   **Workaround:** Use supported browsers such as Google Chrome, Mozilla Firefox, or Microsoft Internet Explorer. Supported versions are listed in the Storage Management Guide and online help.
Issue: After setting up the system successfully, when the user logs in again, the Storage Management Console shows the onboarding wizard instead of the dashboard.   **Workaround:** Click `Continue to Dashboard` to proceed to the Storage Management Console.
Issue: Commands to clear FDE keys takes more time to execute than usual, and the Management Controller does not respond for small intervals of time.   **Workaround:** Wait for 5 minutes and run the command again.
Issue: A controller kills its partner controller due to reason: Partner I/O stall in cache.   **Workaround:** Unkill the failed controller by running the `restart sc <controller name>` CLI command.

Issue: When a system is shut down and restarted, the Management Controller CLI Telnet connection is not available immediately. **Workaround:** Wait for 24 hours for the Management Controller CLI Telnet connection to be established.
Issue: After a reboot, a controller rejects enclosure related commands due to the enclosure not being found. The Storage Controller returns error: "CAPI_ERROR_WWN_NOT_FOUND (81)." **Workaround:** Wait for 5 minutes and run the command again.
Issue: A controller becomes unresponsive and appears to be down even after being unkilled. **Workaround:** Power-cycle the system, or remove and reinsert the failed controller to recover the system.
Issue: The CLI `show alerts` command returns either of the following alerts: "The temperature is below the critical low temperature value." or "The temperature is below the normal operating range." **Workaround:** Consider this alert to be erroneous when it occurs shortly (that is, within 5 minutes) after power cycling a system. Acknowledge the alerts to clear them. If the alert reoccurs within next 10 minutes, consider it a real alert and follow the normal recommended action for this alert.
Issue: After a server is rebooted, controller IP addresses are not accessible via inband protocol. **Workaround:** Disable DHCPv6 on the both controllers.

Regulatory and compliance information

For the latest regulatory and compliance information see www.seagate.com/support. Scroll down to the *Compliance, Safety and Disposal Guide* link.

Open source third-party licenses and code

Seagate storage products use open source software components. To view information about open source software licenses and open source code used in Seagate storage products, see www.seagate.com/support.